

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Vignia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,573	3 12/28/2001		Ian Faye	10191/2172	1542
26646	7590	08/25/2003			
KENYON ONE PROA		ON	EXAMINER		
ONE BROADWAY NEW YORK, NY 10004			ı	NGUYEN, XUAN LAN T	
				ART UNIT	PAPER NUMBER
				3683	
			DATE MAILED: 08/25/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicati n N .	Applicant(s)					
,		10/034,573	FAYE, IAN					
	Office Action Summary	Examiner	Art Unit					
	•	Lan Nguyen	3683					
-	The MAILING DATE of this communication a							
Period for Reply								
THE - Exte after - If the - If NC - Failu - Any	ORTENED STATUTORY PERIOD FOR REP MAILING DATE OF THIS COMMUNICATION nsions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a report of period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by staturely received by the Office later than three months after the mailing ad patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a rep ply within the statutory minimum of thirty (d will apply and will expire SIX (6) MONTH te. cause the application to become ABA	ly be timely filed 30) days will be considered timely. IS from the mailing date of this communication.					
1)🖂	Responsive to communication(s) filed on 16	June 2003 .						
2a)⊠	This action is FINAL . 2b) T	his action is non-final.						
3)□ Dispositi								
4)🖂	Claim(s) 1-10,12-21 and 23-26 is/are pendin	g in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.								
5)	5) Claim(s) is/are allowed.							
6)⊠	6)⊠ Claim(s) <u>1-10,12-21 and 23-26</u> is/are rejected.							
7)	7) Claim(s) is/are objected to.							
8)□	8) Claim(s) are subject to restriction and/or election requirement.							
	on Papers							
9)□ 7	The specification is objected to by the Examin	er.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
11) \boxtimes The proposed drawing correction filed on <u>16 June 2003</u> is: a) \boxtimes approved b) \square disapproved by the Examiner.								
If approved, corrected drawings are required in reply to this Office action.								
	The oath or declaration is objected to by the Ex	kaminer.						
Priority u	nder 35 U.S.C. §§ 119 and 120							
13)⊠	Acknowledgment is made of a claim for foreig	n priority under 35 U.S.C. § 1	19(a)-(d) or (f).					
a)[2	a)⊠ All b)□ Some * c)□ None of:							
	1. Certified copies of the priority documents have been received.							
:	2. Certified copies of the priority documen	ts have been received in App	lication No					
Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.								
	cknowledgment is made of a claim for domest	•						
a)	☐ The translation of the foreign language procknowledgment is made of a claim for domest	ovisional application has beer	received.					
Attachment	•							
2) Notice 3) Inform	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) ation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Info	nmary (PTO-413) Paper No(s) mal Patent Application (PTO-152)					
J.S. Patent and Tra PTO-326 (Rev		ction Summary	Part of Paper No. 7					

DETAILED ACTION

Page 2

Drawings

1. The corrected or substitute drawings were received on 6/16/03. These drawings are approved.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 3. Claims 1-5, 8-10, 23 and 25 are rejected under 35 U.S.C. 102(a) as being anticipated by Troester et al. (DE 19854463 C1).

Re: claims 1, 10, 23 and 25, Troester et al. show a system for avoiding a rollover, as in the present invention, comprising: a first arrangement for reducing a brake force wherein the first arrangement is activatable by the angle of inclination, wherein the first arrangement to reduce the braking force is activated as a function of a slip at the front wheel to reduce the braking force of a rear wheel while the vehicle is traveling backward on a slope, see page 4, lines 30-end of the translation submitted with the Amendment dated 6/16/03. Note that Troester does not specifically recite the slippage occurring at the front wheel and that the reduction of braking force is occurring at the rear wheel. However, according to the law of physics, for a vehicle to travel backward on a slope to

Application/Control Number: 10/034,573

Art Unit: 3683

rollover, the front wheels must lose their grip of the road while the rear wheels are braking too hard. Consider the other alternatives: if all four wheels lose their grip, the vehicle would simply slide down the slope or if the rear wheels lose their grip while the front wheels are gripping the road then the vehicle would effectively stop. Inherently, in order to avoid a rollover situation when the front wheels slip, the braking force of the back wheels would have to be reduced, as is the objective of the patent document of Troester.

Re: claim 2, Troester shows in the last two lines of the Abstract, that one of the actuating factors is the center of gravity of the motor vehicle.

Re: claim 3, Troester shows that the reduction in braking force is a function of a slip (i.e. spin control).

Re: claim 4, it is inherent in any vehicle dynamic control system to either closing an inlet valve or opening an outlet valve to control the brake pressure.

Re: claim 5, Troester shows inclinometer as "detected road inclination".

Re: claims 8 and 9, Troester shows axR, axS as the actual retardation and aRef as a brake for reference wherein the brake reduction would be activated when the reference signal is exceeded.

4. Claims 12-16, 19-21, 24 and 26 are rejected under 35 U.S.C. 102(a) as being anticipated by Troester et al. (DE 19854463 C1).

Re: claims 12, 21, 24 and 26 Troester et al. show a method for avoiding a rollover, as in the present invention, comprising: a first arrangement for reducing a brake force wherein the first arrangement is activatable by the angle of inclination,

Application/Control Number: 10/034,573

Art Unit: 3683

wherein the first arrangement to reduce the braking force is activated as a function of a slip at the front wheel to reduce the braking force of a rear wheel while the vehicle is traveling backward on a slope, see page 4, lines 30-end of the translation submitted with the Amendment dated 6/16/03. Note that Troester does not specifically recite the slippage occurring at the front wheel and that the reduction of braking force is occurring at the rear wheel. However, according to the law of physics, for a vehicle to travel backward on a slope to rollover, the front wheels must lose their grip of the road while the rear wheels are braking too hard. Consider the other alternatives: if all four wheels lose their grip, the vehicle would simply slide down the slope or if the rear wheels lose their grip while the front wheels are gripping the road then the vehicle would effectively stop. Inherently, in order to avoid a rollover situation when the front wheels slip, the braking force of the back wheels would have to be reduced, as is the objective of the patent document of Troester.

Re: claim 13, Troester shows in the last two lines of the Abstract, that one of the actuating factors is the center of gravity of the motor vehicle.

Re: claim 14, Troester shows that the reduction in braking force is a function of a slip (i.e. spin control).

Re: claim 15, it is inherent in any vehicle dynamic control system to either closing an inlet valve or opening an outlet valve to control the brake pressure.

Re: claim 16, Troester shows inclinometer as "detected road inclination".

Art Unit: 3683

Re: claims 19 and 20, Troester shows axR, axS as the actual retardation and aRef as a brake for reference wherein the brake reduction would be activated when the reference signal is exceeded.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Troester et al.

Re: claims 6 and 7, Troester's brake system, as discussed in the rejection of claim 1, lacks alternate methods of estimating the inclination angle. It is old and well known in the art to estimate the angle of inclination using either the mass or the rotation speed of the wheel. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated these estimated methods as a way of saving the cost of purchasing an additional inclinometer; since the mass of the vehicle and the rotation of the wheel are readily available in any vehicle with a brake control system.

7. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Troester et al.

Art Unit: 3683

Re: claims 17 and 18, Troester's method of avoiding rollover, as discussed in the rejection of claim 12, lacks alternate methods of estimating the inclination angle. It is old and well known in the art to estimate the angle of inclination using either the mass or the rotation speed of the wheel. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated these estimated methods as a way of saving the cost of purchasing an additional inclinometer; since the mass of the vehicle and the rotation of the wheel are readily available in any vehicle with a brake control system.

Response to Arguments

8. Applicant's amendment dated 6/16/03 overcomes the rejection based on the patent to Pickenhahn. However, it does not overcome the rejection to Troester, et al. The rejection is repeated above.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Application/Control Number: 10/034,573

Art Unit: 3683

Page 7

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is 703-308-8347. The examiner can normally be reached on M-F, 8 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone numbers for the organization where this application or proceeding is assigned is 703-872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-4177.

XLN

August 11, 2003

PACK LAVINDER SUPERVISORY PAYENT EYANNI

TECHNOLOGY CENTER 3600